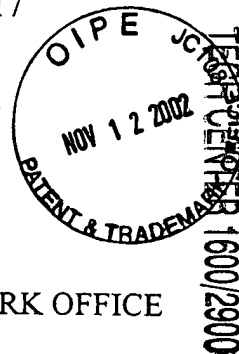


I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 on August 23, 2001.

Frank C. Eisenschenk

Frank C. Eisenschenk, Ph.D., Patent Attorney

DECLARATION UNDER 37 C.F.R. § 1.131
Examining Group 1617
Patent Application
Docket No. UTR-104
Serial No. 09/654,357



NOV 14 2002

RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Helen Nguyen
Art Unit : 1615
Applicants : Michael B. Zemel, Hang Shi, Paula C. Zemel
Serial No. : 09/654,357
Filed : September 1, 2000
For : Materials and Methods for the Treatment or Prevention of Obesity

Commissioner of Patents and Trademarks
Washington, D.C. 20231

DECLARATION UNDER 37 C.F.R. § 1.131

Sir:

DR. MICHAEL B. ZEMEL, DR. HANG SHI, AND DR. PAULA C. ZEMEL DECLARE:

1. THAT we are co-inventors of the invention disclosed and claimed in U.S. Application Serial No. 09/654,357.
2. THAT said invention was completed in the United States prior to January 2000, as shown by the following exhibits. We conceived and reduced to practice methods for the stimulation of lipolysis in animals by increasing the amounts of dietary calcium consumed by these animals. Dietary calcium is provided in the form of calcium carbonate or powdered non-fat milk. Exhibit 1 shows that increasing dietary calcium stimulates lipolysis. The effects of a high calcium diet on adipocyte lipolysis was assayed using a glycerol release assay as described in Example 2 of the above-identified patent application.

3. THAT Exhibit 1 is a copy of pages taken from a laboratory record created and maintained in the normal course of laboratory operations, prior to January 2000. The completion date of the experiments and analyses recorded in these laboratory notebook pages have been redacted. We hereby attest that these redacted dates are prior to the critical date.

We hereby further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

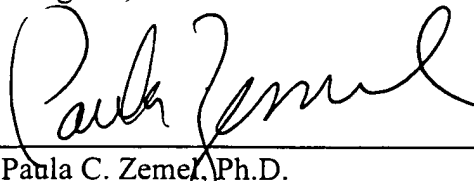
Further, Declarants sayeth not.

By: _____
Michael B. Zemel, Ph.D.

Date: _____

By: _____
Hang Shi, Ph.D.

Date: _____

By:  _____
Paula C. Zemel, Ph.D.

Date: 8-21-2007

PHOTOMETRY/GLYCL-ni

ID	I	mol/l			
STD 1	1.000	0.000			
STD 1	1.000	0.000			
MEAN	1.000	0.000	SD=	0.000	RSD= 0.489
STD 2	1.000	1.000			
STD 2	1.000	1.000			
MEAN	1.000	1.000	SD=	0.000	RSD= 0.072
STD 3	2.000	2.500			
STD 3	3.007	2.500			
MEAN	3.078	2.500	SD=	0.026	RSD= 0.844
STD 4	3.319	5.000			
STD 4	3.315	5.000			
MEAN	3.317	5.000	SD=	0.002	RSD= 0.024

PHOTOMETRY/GLYCEROL

ID	I	mol/l			
STD 1	2.000	0.000			
STD 1	1.995	0.000			
MEAN	2.000	0.000	SD=	0.007	RSD= 0.350
STD 2	2.980	0.050			
STD 2	3.001	0.050			
MEAN	2.994	0.050	SD=	0.009	RSD= 0.300
STD 3	3.394	0.100			
STD 3	3.417	0.100			
MEAN	3.405	0.100	SD=	0.016	RSD= 0.190
STD 4	10.77	0.250			
STD 4	10.75	0.250			
MEAN	10.76	0.250	SD=	0.014	RSD= 0.130
STD 5	15.30	0.500			
STD 5	15.36	0.500			
MEAN	15.36	0.500	SD=	0.000	RSD= 0.000
STD 6	15.44	1.000			
STD 6	15.15	1.000			
MEAN	15.41	1.000	SD=	0.009	RSD= 0.059
1	4.773	0.074			
1	4.762	0.074			
1a MEAN	4.767	0.074	SD=	0.000	RSD= 0.000
2	1.096	0.036			
2	1.070	0.035			
1b MEAN	1.083	0.035	SD=	0.000	RSD= 0.000
3	6.028	0.143			
3	6.022	0.143			
2a MEAN	6.025	0.143	SD=	0.000	RSD= 0.000
4	3.148	-0.016L			
4	3.173	-0.014L			
2a MEAN	3.160	-0.015	SD=	0.001	RSD= -6.667
5	3.473	0.002			
5	3.479	0.003			
2b MEAN	3.476	0.002	SD=	0.000	RSD= 0.000
6	5.089	0.092			
6	5.085	0.091			
4a MEAN	5.087	0.091	SD=	0.000	RSD= 0.000
7	4.540	0.061			
7	4.520	0.061			

6	5.085	0.091		
4a	MEAN=	0.091	SD=	0.000 RSD= 0.000
7	4.540	0.061		
7	4.530	0.061		
4b	MEAN=	0.061	SD=	0.000 RSD= 0.000
8	5.955	0.139		
8	5.933	0.138		
5a	MEAN=	0.138	SD=	0.000 RSD= 0.000
9	5.967	0.140		
9	5.941	0.139		
5b	MEAN=	0.139	SD=	0.000 RSD= 0.000
10	3.946	0.028		
10	3.929	0.028		
6a	MEAN=	0.028	SD=	0.000 RSD= 0.000
11	2.255	-0.065L		
11	2.259	-0.065L		
6b	MEAN=	-0.065	SD=	0.000 RSD= 0.000
12	5.853	0.134		
12	5.841	0.133		
7a	MEAN=	0.133	SD=	0.000 RSD= 0.000
13	6.030	0.143		
13	6.004	0.142		
7b	MEAN=	0.142	SD=	0.000 RSD= 0.000
14	4.075	0.036		
14	4.045	0.034		
8a	MEAN=	0.035	SD=	0.001 RSD= 2.857
15	4.996	0.086		
15	4.993	0.086		
8b	MEAN=	0.086	SD=	0.000 RSD= 0.000
16	3.735	0.020		
16	3.782	0.019		
9a	MEAN=	0.019	SD=	0.000 RSD= 0.000
17	5.017	0.023		
17	5.020	0.023		
9b	MEAN=	0.023	SD=	0.000 RSD= 0.000
18	5.373	0.107		
18	5.365	0.107		
10a	MEAN=	0.107	SD=	0.000 RSD= 0.000
19	2.711	-0.040L		
19	2.705	-0.040L		
10b	MEAN=	-0.040	SD=	0.000 RSD= 0.000
20	4.237	0.045		
20	4.234	0.044		
11a	MEAN=	0.044	SD=	0.000 RSD= 0.000
21	5.423	0.110		
21	6.055	0.145		
11b	MEAN=	0.127	SD=	0.024 RSD= 18.89
22	6.032	0.144		
22	6.035	0.144		
11a	MEAN=	0.144	SD=	0.000 RSD= 0.000
23	6.307	0.159		
23	6.277	0.157		
12a	MEAN=	0.158	SD=	0.001 RSD= 0.632
24	8.206	0.264		
24	8.546	0.282		
12b	MEAN=	0.273	SD=	0.012 RSD= 4.395
25	4.812	0.078		
25	4.841	0.078		
13a	MEAN=	0.078	SD=	0.000 RSD= 0.000
26	4.835	0.073		
26	1.816	0.076		
13b	MEAN=	0.077	SD=	0.001 RSD= 1.298
27	5.661	0.123		
27	5.822	0.132		
14a	MEAN=	0.127	SD=	0.006 RSD= 4.724
28	2.061	-0.076L		
28	2.028	-0.077L		
14b	MEAN=	-0.077	SD=	0.000 RSD= 0.000
29	4.391	0.053		
29	1.857	0.051		
15a	MEAN=	0.052	SD=	0.001 RSD= 1.028
30	5.045	0.089		
30	5.008	0.087		

15a	MEAN=	0.052	SD=	0.001	RSD=	1.923
30		5.045	0.089			
30		5.008	0.037			
15b	MEAN=	0.038	SD=	0.001	RSD=	1.136
31		2.682	0.041L			
31		2.659	0.043L			
16a	MEAN=	-0.042	SD=	0.001	RSD=	-2.381
32		5.409	0.109			
32		5.397	0.109			
16b	MEAN=	0.109	SD=	0.000	RSD=	0.000
33		3.110	0.018L			
33		3.110	0.018L			
1a	MEAN=	-0.018	SD=	0.000	RSD=	0.000
34		3.390	0.002L			
34		3.410	0.001L			
1b	MEAN=	-0.002	SD=	0.000	RSD=	0.000
35		3.404	0.001L			
35		3.113	0.017L			
2a	MEAN=	-0.009	SD=	0.011	RSD=	-122.2
36		2.359	0.059L			
36		2.348	0.060L			
2b	MEAN=	-0.060	SD=	0.000	RSD=	0.000
37		3.371	0.003L			
37		3.382	0.003L			
3b	MEAN=	-0.003	SD=	0.000	RSD=	0.000
38		3.064	0.020L			
38		3.067	0.020L			
4a	MEAN=	-0.020	SD=	0.000	RSD=	0.000
39		2.652	0.043L			
39		2.640	0.044L			
4b	MEAN=	-0.044	SD=	0.000	RSD=	0.000
40		2.802	0.035L			
40		2.746	0.038L			
5a	MEAN=	-0.037	SD=	0.002	RSD=	-5.406
41		5.112	0.093			
41		4.785	0.075			
5b	MEAN=	0.084	SD=	0.012	RSD=	14.28
42		5.600	0.120			
42		5.577	0.118			
6a	MEAN=	0.119	SD=	0.001	RSD=	0.840
43		3.639	0.012			
43		3.652	0.012			
6b	MEAN=	0.012	SD=	0.000	RSD=	0.000
44		5.071	0.091			
44		5.060	0.090			
7a	MEAN=	0.090	SD=	0.000	RSD=	0.000
45		3.980	0.030			
45		3.985	0.031			
7b	MEAN=	0.030	SD=	0.000	RSD=	0.000
46		4.219	0.044			
46		4.212	0.043			
8a	MEAN=	0.043	SD=	0.000	RSD=	0.000
47		4.821	0.077			
47		4.792	0.075			
8b	MEAN=	0.076	SD=	0.001	RSD=	1.315
48		4.956	0.084			
48		4.955	0.084			
9a	MEAN=	0.084	SD=	0.000	RSD=	0.000
49		4.111	0.038			
49		4.082	0.036			
9b	MEAN=	0.037	SD=	0.001	RSD=	2.702
50		4.999	0.087			
50		5.004	0.087			
10a	MEAN=	0.087	SD=	0.000	RSD=	0.000
51		4.033	0.033			
51		4.046	0.034			
10b	MEAN=	0.033	SD=	0.000	RSD=	0.000
52		4.807	0.076			
52		4.792	0.075			
11a	MEAN=	0.075	SD=	0.000	RSD=	0.000
53		5.049	0.089			
53		5.044	0.089			

49 4.111 0.038
 9b MEAN= 0.037 SD= 0.000 RSD= 2.702
 50 4.999 0.087
 50 5.004 0.087
 10a MEAN= 0.087 SD= 0.000 RSD= 0.000
 51 4.033 0.033
 51 4.046 0.034
 10b MEAN= 0.033 SD= 0.000 RSD= 0.000
 52 4.307 0.076
 52 4.792 0.075
 11a MEAN= 0.075 SD= 0.000 RSD= 0.000
 53 5.049 0.089
 53 5.044 0.089
 11b MEAN= 0.089 SD= 0.000 RSD= 0.000
 54 5.669 0.124
 54 5.674 0.124
 12a MEAN= 0.124 SD= 0.000 RSD= 0.000
 55 5.830 0.132
 55 5.793 0.130
 12b MEAN= 0.131 SD= 0.001 RSD= 0.763
 56 5.551 0.117
 56 5.523 0.115
 13a MEAN= 0.116 SD= 0.001 RSD= 0.862
 57 3.558 0.007
 57 3.551 0.007
 13b MEAN= 0.007 SD= 0.000 RSD= 0.000
 58 6.217 0.154
 53 6.194 0.153
 14a MEAN= 0.153 SD= 0.000 RSD= 0.000
 59 1.984-0.080L
 59 1.982-0.080L
 14b MEAN= -0.080 SD= 0.000 RSD= 0.000
 60 5.393 0.108
 60 5.395 0.108
 15a MEAN= 0.108 SD= 0.000 RSD= 0.000
 61 5.425 0.110
 61 5.424 0.110
 15b MEAN= 0.110 SD= 0.000 RSD= 0.000
 62 2.896-0.029L
 62 2.897-0.029L
 16a MEAN= -0.029 SD= 0.000 RSD= 0.000
 63 5.112 0.093
 63 5.154 0.095
 16b MEAN= 0.094 SD= 0.001 RSD= 1.063
 64 5.840 0.133
 64 5.849 0.133
 1 MEAN= 0.133 SD= 0.000 RSD= 0.000
 65 5.858 0.134
 65 5.859 0.134
 2 MEAN= 0.134 SD= 0.000 RSD= 0.000
 66 5.021 0.088
 66 5.011 0.087
 3 MEAN= 0.087 SD= 0.000 RSD= 0.000
 67 5.401 0.109
 67 5.413 0.109
 4 MEAN= 0.109 SD= 0.000 RSD= 0.000
 68 5.938 0.138
 68 5.860 0.134
 5 MEAN= 0.136 SD= 0.002 RSD= 1.470
 69 5.449 0.111
 69 5.256 0.101
 6 MEAN= 0.106 SD= 0.007 RSD= 6.603
 70 2.213-0.067L
 70 2.209-0.067L
 7 MEAN= -0.067 SD= 0.000 RSD= 0.000
 71 5.759 0.129
 71 5.740 0.127
 8 MEAN= 0.128 SD= 0.001 RSD= 0.781

8	0.221	0.1988	1.11167	
			0.947136	
ACTH(100nM)				
con				
1a	0.038	0.3977	0.095549	
1b	0.057	0.3636	0.156766	
2a	0.058	0.4902	0.118319	
2b		0.4441		
3b	0.056	0.3771	0.148502	
4a	0.035	0.5005	0.06993	
4b	0.006	0.5643		0.010633
avg			0.117813	
high-Ca				
5a	0.017	0.4475		0.037989
5b	0.177	0.3302	0.536039	
6a	0.21	0.4576	0.458916	
6b	0.075	0.4078	0.183914	
7a	0.174	0.3832	0.454071	
7b	0.098	0.5349	0.183212	
8a	0.115	0.4088	0.281311	
8b	0.154	0.2215	0.69526	
avg			0.39896	
medium-dairy				
9a	0.166	0.5304	0.312971	
9b	0.107	0.4747	0.225406	
10a	0.169	0.53	0.318868	
10b	0.103	0.5327	0.193355	
11a	0.155	0.3235	0.479134	
11b	0.172	0.3931	0.437548	
12a	0.216	0.2288	0.944056	
12b	0.226	0.2761	0.818544	
avg			0.466235	
high-dairy				
13a	0.207	0.3945	0.524715	
13b	0.069	0.3999	0.172543	
14a	0.253	0.307	0.824104	
14b	0.237	0.2847	0.832455	
15a	0.196	0.2033	0.964092	
15b	0.198	0.3495	0.566524	
16a	0.023	0.4219		0.054515
16b	0.18	0.4152	0.433526	
avg			0.616851	